

Laparoscopic Appendectomy

Information for Parents and Caregivers



Table of Contents

Thank you for choosing Atrium Health Wake Forest Baptist- Brenner Children's Hospital. Please let us know if you have questions about the information we give you. It's okay to ask us to explain words or phrases that you do not understand.

- Introduction 2
- Fast Facts About Laparoscopic Appendectomy 2
- What is a Laparoscopic Appendectomy? 2
- Getting Ready for the Surgery 3
- Going to Sleep 4
- While Asleep 4
- The Surgery 4
- Waking Up 5
- The Role of Parents and Caregivers During the Surgery 5
- Pain Medicine 5
- What to Expect if the Appendix Has Burst 6
- At Home After the Surgery 6
- Bathing 6
- Activity 6
- When to Call the Doctor 7
- Questions 7
- Follow Up 7
- Your Pediatric Surgery Team 8
- Notes 9

Introduction

Brenner Children's Hospital is a Level I Children's Surgery Center, verified by the American College of Surgeons (ACS). This program focuses on the nation's first and only multi-specialty standards of surgical care for pediatric patients. Having your child cared for at an ACS Verified Level 1 Center means your child will receive surgical care meeting the highest standards.



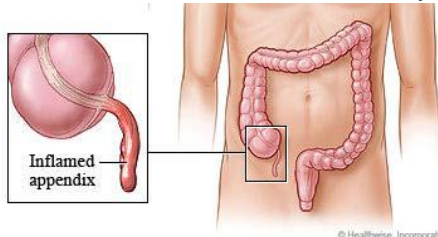
As parents and caregivers, you are vital to the success of your child's surgery. At Brenner Children's Hospital, we want you to be involved in your child's care. Please review this information to help you learn about your child's surgery and your role in their recovery.

Fast Facts about Laparoscopic Appendectomy

- An appendectomy (app-pen-DECK-toe-me) is an operation to remove the appendix when it has become inflamed (swollen) or infected. An inflamed appendix is called appendicitis (uh-pen-di-SIGH-tus).
- Appendicitis is most often treated with surgery right away. Without this surgery, the appendix could burst and cause a serious or life-threatening infection.
- Your child's surgery will be done under general anesthesia (an-es-THEEZ-ya). This means they will be asleep during the surgery.
- The surgery will take about 1 hour.
- Your child will most likely go home after the surgery. If there is infection from the appendix bursting, they will be in the hospital for a few days.

What is a Laparoscopic Appendectomy?

- The appendix (uh-PEN-dix) is a finger-shaped organ in the lower right side of the belly. It is joined to the large intestine.
- We have not learned yet why humans have an appendix. We do know it is safe to remove it when it is causing illness.
- An appendectomy is an emergency surgery for appendicitis. This means the appendix has become inflamed (swollen) and needs to be removed. If it is not removed, it could burst and cause infection in the belly called peritonitis (*per-i-toe-NY-tus*).



- For more information on acute (early) appendicitis, scan the QR code:

- A laparoscopic (*lap-a-ro- SKOPP-ik*) or “lap” appendectomy is a surgery to remove the appendix. It is done with several small cuts, rather than one large one. Healing time from this surgery is short.
- In some cases, the appendix cannot be removed with laparoscopic surgery. This may happen if the appendix has burst and there is infection in the belly. An open surgery with a larger cut is needed. Your surgeon will talk to you about which surgery is best for your child.
- This surgery is the most common pediatric emergency surgery but all surgery has risks. Risks of this surgery are:
 - Infection
 - Bleeding
- Your child’s surgeon will review the risks with you before the surgery. We will ask you to sign a form giving permission before the surgery.
- An attending pediatric surgeon will do your child’s surgery. This surgeon has extra training in the care of children. Doctors who are training to be surgeons (surgery residents) will also help with the surgery. Having two surgeons means your child will have excellent care during the operation.

Getting Ready for the Surgery

- Most children who need a lap appendectomy come to the Emergency Department. After checking in, your child will not be able to eat or drink. When the doctors suspect appendicitis, they will give your child antibiotics. Your child will go to surgery within several hours.
- You and your child will then go to the Holding Room in the Pediatric Operating Room. You will meet the attending anesthesiologist. This is a doctor who gives medicine to help your child sleep (anesthesia) during surgery. They will ask you questions about your child’s health and when they last ate.
- Anesthesia residents and nurse anesthetists (CRNAs) also help care for your child before, during, and after surgery.
- We will ask you to sign a permission form before we give your child anesthesia.
- You will meet nurses who will care for your child during surgery. They will do a safety check to make sure your child is ready to go back to the operating room.
- We will ask your child to use the bathroom in the holding room before surgery. Emptying the bladder before surgery helps keep it out of the way while the surgeon is working in the belly to remove the appendix.



Going to Sleep

- If your child is very scared or upset, the doctor may give a special medicine to help them relax.
- We will start an IV to give medicine to help your child fall asleep for the surgery.
- When everyone is ready, your child will move from the holding room to the operating room. Once your child is asleep, the anesthesia doctor will place a breathing tube to help them breathe while they get the medicine to help them sleep.
- While your child is in surgery, you will wait in the surgical waiting room.

While Asleep

- While your child is asleep, we will check your child's heart rate, blood pressure, temperature, and blood oxygen level frequently. Your child may have a sore throat after surgery from the breathing tube.

The Surgery

- We will start the anesthesia and position your child for the operation. Once they are asleep, the surgery will begin. We will tell you when surgery starts.
- Your child's surgeon will make 2 or 3 small cuts near your child's belly button and in the lower belly.
- The surgeon will use gas to puff up the belly to make room to work. They will then insert a camera to see the appendix.
- They will use instruments to separate the appendix from the large intestine and remove it.
- If your child's appendix has burst, the surgeon will clean out their belly to help lower the spread of infection.
- Once the area is clean, the surgeon will remove the air from the belly.
- After the surgeon removes the appendix, they will close the cuts with stitches. These stitches will dissolve on their own and do not need to be removed.
- The surgeon will cover the cuts with liquid skin glue or strips called Steri-Strips™. Both will fall off on their own. On top of that, your child's surgeon may also cover the cuts with gauze or Band-Aids. These should stay on for 48 hours.
- While your child is in the operating room, you will get updates every 60-90 minutes.

Waking Up

- After surgery, we will take your child to the Post Anesthesia Care Unit, or PACU (pack- u). It is also called the recovery room. This is where your child will wake up from anesthesia. We will update you when the surgery is over.
- Children waking up from surgery react in many ways. Your child might cry, be fussy or confused, feel sick to their stomach, or vomit. This is normal and will go away as the medicine wears off.
- While your child is in recovery, your surgeon will talk to you about the surgery. This is a good time to ask questions about pain medicines, what your child can eat and what they can do after surgery.
- Your child will spend about 1 hour in the PACU, but times may vary. Once your child is recovering and their pain is controlled, they will either go home or stay at the hospital. This depends on if the appendix ruptured.



The Role of Parents and Caregivers During the Surgery

- Your role is to help your child stay calm and relaxed before the surgery. The best way to help your child stay calm is for you to stay calm.
- Please talk to your child or hold their hand before the surgery, while sleep medicine is given, and when you see your child after surgery.
- You may bring along a “comfort” item — like a favorite stuffed animal or “blankie” — for your child to hold before and after the surgery.

Pain Medicine

- During the surgery, we will give your child a numbing medicine in the surgical cuts to help reduce pain after surgery.
- After surgery, your child will most likely have pain. Your child may take acetaminophen (Tylenol) or ibuprofen (Motrin).
- These things also help manage your child’s pain after surgery:
 - Have a parent or other special person there. Children feel safe with a parent nearby.
 - Heat, cold, and vibration can reduce pain. It helps to switch between using heating pads and ice packs. Vibration can also block pain.

- Deep and steady breathing can help reduce pain and gain self-control
- Comforting touch. This can be holding, rocking, cuddling, and massaging.
- Distract your child from the pain. Talking, reading and being read to, video games, breathing exercises, blowing bubbles, and television are all helpful activities to take their mind off pain.
- Play or be silly. Children relax and forget their worries when they play.
- Relaxation may be helpful for teens.
- Be positive! Remind your child that they are doing well and that their body is healing!

What to Expect if the Appendix Has Burst

- If your child's appendix has burst, we will treat them with antibiotics for infection through an IV. Your child may go home with antibiotics to take by mouth and possibly a special IV called a PICC (pick) line. This is a longer IV, usually placed in the upper arm and used for IV antibiotics.
- We will show you how to care for your child's incisions and/or PICC line before leaving the hospital.
- For more information on a burst appendix, scan the QR code:



At Home After the Surgery

- After your child goes home, they should take it easy and rest until they are feeling better.
- If your child goes home on the day of surgery, they can eat what they feel they can. They need to drink lots of liquids like water, Gatorade®, Popsicles®, Kool-Aid®, broth, or clear juices.
- Follow up with your surgeon will happen about 2 weeks after leaving the hospital.

Bathing

- Your child may take a shower 2 days after the surgery. They may take a bath 7 days after surgery.

Activity

- After surgery, your child can start back their regular activities when they feel up to it.
- Your child may return to school in 2 days.
- Your child may play contact sports and go to gym class once they are feeling back to normal.
- Your child may swim 1 week after surgery
- Walking and stair climbing are good for your child

When to Call the Doctor

- If your child has a fever higher than 101°F more than 48 hours after surgery
- Drainage from the incisions.
- Increased soreness near the incisions
- Redness around the incisions
- Nausea, vomiting, diarrhea, or constipation that is not getting better.
- Pain that is getting worse

Questions

- Call our Surgery Patient Support Line at **336-716-0423, option 2**, if you have questions or concerns about your child's care. Between 8am and 5pm leave a message and someone will call you back.
- For urgent needs on nights or weekends, call 336-716-2011 and ask for the doctor on call for Pediatric Surgery

Follow Up

A day or two after surgery, one of our recovery room nurses will call to check on your child. We will also arrange a follow-up visit with your surgeon about 2 weeks after surgery. If this is not scheduled when your child leaves the hospital, please call our office at **336-716-7799** to make this appointment.

We see patients in 3 locations as well as through Telehealth. Please ask to see us in the way that works best for you. If you would like an in-person appointment, please choose from one of these locations.

1. Janeway Tower, Main Campus (Winston-Salem) 5th floor in the general surgery clinic
2. Brenner Hospital, Main Campus (Winston-Salem) 7th floor in the Pediatric Multidisciplinary Clinic
3. Medical Plaza - North Elm (1st floor 3902 N. Elm Street, Greensboro)

A month or two after surgery, one of our surgical quality nurses may call you. They are calling you to be sure we are giving the best care possible.

Please take the time to fill out our patient satisfaction survey. We want to know what went well during your child's care experience and which things we can work to improve.

If you have questions about billing or insurance, please call our Customer Service Center 336-716-3988 or 888-663-6580 Monday-Friday 8am - 5pm Eastern Time.

Your Pediatric Surgery Team



Mitchell Ladd, MD, PhD
Pediatric Surgeon



Lucas Paul Neff, MD
Pediatric Surgeon



John K. Petty, MD
Pediatric Surgeon



Thomas Pranikoff, MD
Pediatric Surgeon



Leah Marie Sieren, MD
Pediatric Surgeon



Kristen Zeller, MD
Pediatric Surgeon



Sue Fitzko, NP
Nurse Practitioner



Sunny Marie Joyce, NP
Nurse Practitioner

Notes

Laparoscopic Appendectomy

CONTENT CONTRIBUTION:

Kristen Zeller, MD

Jessica H. Brown, RN, MSN, MBA

PRODUCED BY:

Bethany Howell, MSN, RN

Patient Education Coordinator

Patient Education – This information is general. If your doctor tells you something different, follow his or her advice and instructions.

Copyright 2022

By the Department Surgery,

Section of Pediatric Surgery

No part of this publication may be reproduced without the written permission of the Patient Education Systems Coordinator and/or the Director of Nursing.

I:\Pated\Patient Education\booklets\2022\LapApp.doc

Brenner Children's

 **Atrium Health**
Wake Forest Baptist

Medical Center Boulevard
Winston-Salem, North Carolina 27157

[WakeHealth.edu/locations/hospitals/brenner-childrens](https://www.wakehealth.edu/locations/hospitals/brenner-childrens)